UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF: SR-6J

September 13, 2012

Thomas W. Steib
Operations Manager
Detrex Chemicals Division
Elco Corporation
1100 N. State Road
Ashtabula, OH 44004

Re: *Additional DNAPL Recovery Well Installation and Testing Work Plan*
URS Corporation, August 24, 2012

Dear Mr Steib:

EPA has completed its review of the *Well Installation and Recovery Work Plan*, submitted electronically to EPA by URS on behalf of Detrex on August 24.

Except as noted in the attached comments, EPA concurs with the *Work Plan*. Although our comments note that a more detailed project schedule is necessary, you may proceed with the drilling while concurrently working on the schedule and responding to comments. We also understand that the schedule may change, depending on the weather and data being obtained.

It is our understanding that the Fields Brook Action Group may be providing comments on the work plan, but we have not yet received them as of the date of this letter. We encourage you to work directly with FBAG during my absence in the last two weeks of September to resolve any concerns or suggestions. Please provide me with an email update on or before October 2 on the status of the well installation.

I can be reached by phone until September 17 at 312 886-4843 if you have any questions. In my absence, questions on our comments can be directed to William Earle of SulTRAC at 312 443-0550, Extension 12. You also may connect Peter Felitti at 312 886-5114 if you have any questions.

Sincerely,

W. Owen Thompson
Remedial Project Manager
Superfund Division

Attachment

cc: Peter Felitti, U.S. EPA, C-14J
Regan Williams, Ohio EPA NEDO
Robert Currie, Detrex
Ralph Cascarilla, Walter & Haverfield LLC
Martin Schmidt, URS
Robert Rule, de maximus, inc.

U.S. Environmental Protection Agency Region 5

Comments on
Additional DNAPL Recovery Well Installation and
Testing Work Plan
Detrex Corporation RD/RA Source Control Area
Fields Brook Superfund Site
Ashtabula, Ohio

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document for the Fields Brook Superfund Site in Ashtabula, Ohio. On behalf of the Detrex Corporation, URS Corporation (URS) submitted the document to the EPA.

GENERAL COMMENT

1. A more specific proposed schedule should be provided prior to the start of testing. Specifically, the schedule should discuss the order of the testing to be conducted. It is understood that this schedule may change based on weather and field results.

SPECIFIC COMMENTS

1. **Section 1.2, Page 1-4:** The text should be revised to state that in addition to evaluating the three different well designs, an additional objective of the testing is to obtain information needed to potentially design a remedial system using one (or more) of the well designs based on the results of the testing.
2. **Section 2.3.1, Page 2-4:** The text should be revised to state that after completion of the well inventory, either repairs will be performed on the wells (as needed) or a list of wells to be repaired (along with a reason for selecting or not selecting a well for repair) will be provided. This approach will assist in maintaining a monitoring network at the site.
3. **Section 2.3.2, Page 2-5:** In addition to the data to be collected, the text should be revised to state that dense nonaqueous-phase liquid (DNAPL) inflow (return) data may require collection in a timeframe involving days or weeks after initial removal. DNAPL inflow (return) data would be useful in evaluating if DNAPL is present in the annulus space of a

well (where it probably would inflow relatively quickly) or from surrounding soil (where inflow may require a longer time).

4. **Section 2.3.3, Page 2-6:** Consideration should be given to measuring the contact angle and wettability of the DNAPL as well as the parameters specified. The information from these two additional parameters could be useful in evaluating the movement of DNAPL and in assisting in the design (U.S. Army Corps of Engineers 1999).

5. **Section 2.3.4, Figure 2-2:** The general locations for the additional well testing shown in Figure 2-2 are acceptable. The general area for the recovery wells includes an area located outside the lagoon boundaries. However, based on best available information, it is recommended that the location of each recovery well for the lagoon area be within the limits of a former lagoon.

6. **Section 2.3.4.3, Page 2-8:** Based on the relatively small quantity of waste likely to be generated during installation of the recovery wells and monitoring points, consideration should be given to managing the investigation-derived waste (IDW) in a more mobile format, such as drums or other containers, than the soil management area proposed. Such an approach may facilitate full implementation of a remedial system by allowing soil and IDW to be easily moved out of the way.

7. **Section 2.3.4.3, Page 2-8:** The management of IDW as outlined has been approved by the EPA. However, it is recommended that IDW be managed in a manner that will not prohibit the future installation of a remedial system(s) or component(s).

8. **Section 2.3.5.2, Figure 2-6:** For the testing area within the footprint of the former lagoon, the figure should include an additional probe location or two outside the former lagoon footprint to provide information regarding the effectiveness of recovery wells inside the lagoon on areas outside the lagoon. This information would be useful for any full-scale design.

9. **Section 2.3.5.2, Page 2-11, Bullets 1 through 5:** In addition to the data proposed for collection, the vacuum at various locations (wellhead, vacuum pump, and monitoring probes) should be measured as well as the vapor/air flow rate through the vacuum pump.

The equipment proposed for the testing appears to be adequate for testing purposes. Consideration should be given to adding a low-permeability cover (such as a sheet of plastic similar to a painter's drop cloth) to reduce short circuiting if the data indicate that short circuiting is or may be occurring. Such a cover could be held down by gravel, sand bags, or equivalent means.

10. **Section 2.3.7, Page 2-12:** It is recommended that raw data (such as instrument readings, field notes, and operational notes) be submitted on a regular basis during the testing period. Data analysis is not required for the raw data, and can wait until preparation of the Technical Memorandum at the end of the testing.

REFERENCE

U.S. Army Corp of Engineers. 1999. "Engineer Manual 1110-1-4010, Engineering and Design: Multi Phase Extraction." June.